

DATA STORAGE MEDIA

ABSTRACT OF THE DISCLOSURE

[0120] In one embodiment, a data storage media comprises: a substrate comprising at least one plastic portion, an edge lift height of less than about $8\text{ }\mu$, and an axial displacement peak of less than about $500\text{ }\mu$ under shock or vibration excitation; and at least one data layer on said substrate. The data layer can be at least partly read from, written to, or a combination thereof by at least one energy field, and, when the energy field contacts the storage media, the energy field is incident upon the data layer before it could be incident upon the substrate.

[0121] In another embodiment, the data storage media comprises: a substrate comprising at least one plastic portion and an axial displacement peak of less than about $500\text{ }\mu$ under shock or vibration excitation, and an areal density of about 10 Gbit/in^2 ; and at least one data layer on the substrate. The data layer can be at least partly read from, written to, or a combination thereof by at least one energy field, and, when the energy field contacts the storage media, the energy field is incident upon the data layer before it could be incident upon the substrate.